



Transactional Facility Management Standard (FMSFIE)

for facilities, infrastructure, & environment

Naming Convention and Structure Specification

Version 2
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The CADD/GIS Technology Center
For facilities, infrastructure, and environment
Information Technology Laboratory
U.S. Army Engineer Research and Development Center
Vicksburg, Mississippi

Definitions

Transactional - Transactional is defined as communicative actions or activities, involving multiple parties or things that reciprocally affect each other in a near real time setting that is based on life cycle events.

Facilities, Infrastructure, and Environment - Facilities, Infrastructure, and Environment is recognized as the focal point for utilization and management capabilities that Computer Aided Drafting and Design, Geospatial Information, and Facility Management support. The Facilities, Infrastructure and Environmental establishes a cooperative interaction of private, public, and academic resources for the investigation, verification, and transfer of integrated information.

Background

Initial development of the FMSFIE began in 1997. An underlying criteria for development of the FMSFIE has been to provide integration with the CADD/GIS Technology Center's CADD (AEC CADD Standard) and GIS (SDSFIE) data standards. Several different strategies were evaluated for integration of the FMSFIE within the SDSFIE and A/E/C CADD Standard. It was determined that, initially, the FMSFIE would be incorporated within the SDSFIE data model (designated as FM Entity Classes within the appropriate SDSFIE Entity Sets). This stage of FMSFIE development focused on: (1) Development of "business" FM, "event," and temporal information (e.g., construction, operation, maintenance, repair, and inspection records) concerning the "real-world" features/objects depicted in the SDSFIE and Architectural, Engineering, and Construction (A/E/C)/CADD Standard, and (2) Development of the capability to link to and share data with "corporate" databases, computerized information management systems, computer maintenance management systems, and commercially available FM software.

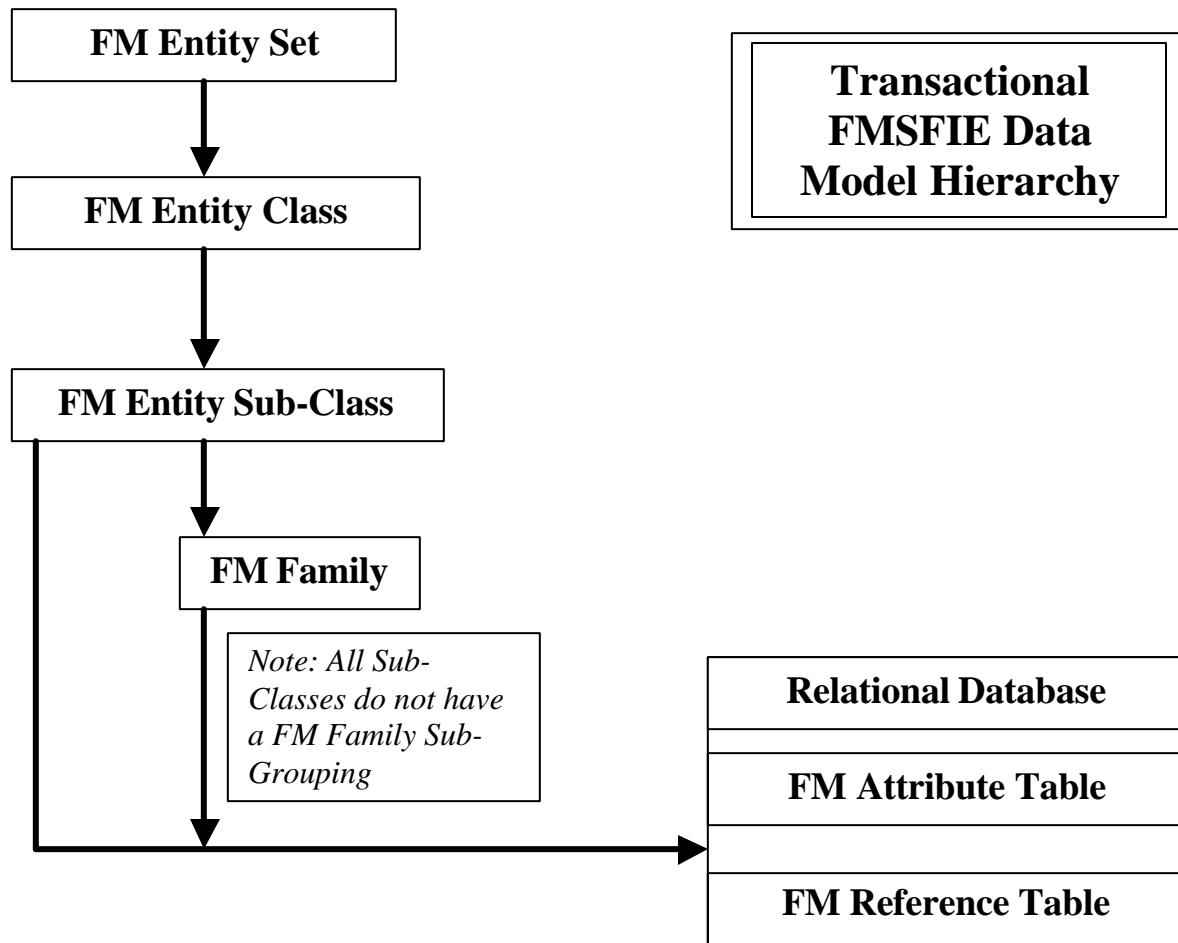
The first release of the FMSFIE (formerly called Tri-Service Facility Management Standards (TSFMS), and Facility Management Standards (FMS)) was published with Release 1.80 of the SDSFIE (formerly called Tri-Service Spatial Data Standards (TSSDS)) in February 1999.

In Fiscal Year 2000, the CADD/GIS Technology Center's Standards Working Group (SWG) and Corporate Staff (CS) approved a FMSFIE development Strategic Plan (<http://tsc.wes.army.mil/products/tssds-tsfs/fms/projects/fmsfiepr.htm>), which provided a framework and strategy for evolution of the FMSFIE to a more robust "transactional" data model closely integrated with the SDSFIE & A/E/C CADD Standard. Development of the "transactional" FMSFIE data model and standard began in Fiscal Year 2000, with an initial focus on Asset Management. Its first release will be included with the SDSFIE & FMSFIE Release 2.30, scheduled to be completed in September 2003. The transactional FMSFIE defines a data model and data dictionary for facility management legal and Federal data reporting requirements encompassing the areas of asset management, work management, environmental management, public safety management, organization management, information security management, and financial management. In addition, the design of the FMSFIE will facilitate the sharing of data between various facility management (FM) information management systems (IMS) (e.g., Army Integrated Facilities System (IFS), Air Force Interim Work Information Management System (IWIMS), Air Force Automated Civil Engineer System (ACES), Navy Facility Assets Data Base

(NFADB), Army Corps of Engineers Facilities and Maintenance System (FEM), and OSD RPES).

Like the SDSFIE, the transactional FMSFIE is being designed for implementation using commercially available relational database software (e.g., Oracle and SQL Server) and a Microsoft Windows Operating System (e.g., Windows 2000, XP, & NT). The FMSFIE is non-proprietary, thereby permitting other organizations, contractors, and vendors the ability to freely use the data schema and data dictionary, share FMSFIE compliant data with other organizations, and build applications based upon the FMSFIE data schema.

Transactional FMSFIE Data Model Hierarchy



Entity Set - Broad grouping of real property management responsibilities.

Entity Class – Sub-grouping of an Entity Set providing a grouping of similar real property classifications based on legal reporting requirements.

Entity Sub-Class – Sub-grouping of an Entity Class based on similar life-cycle event and temporal real property information.

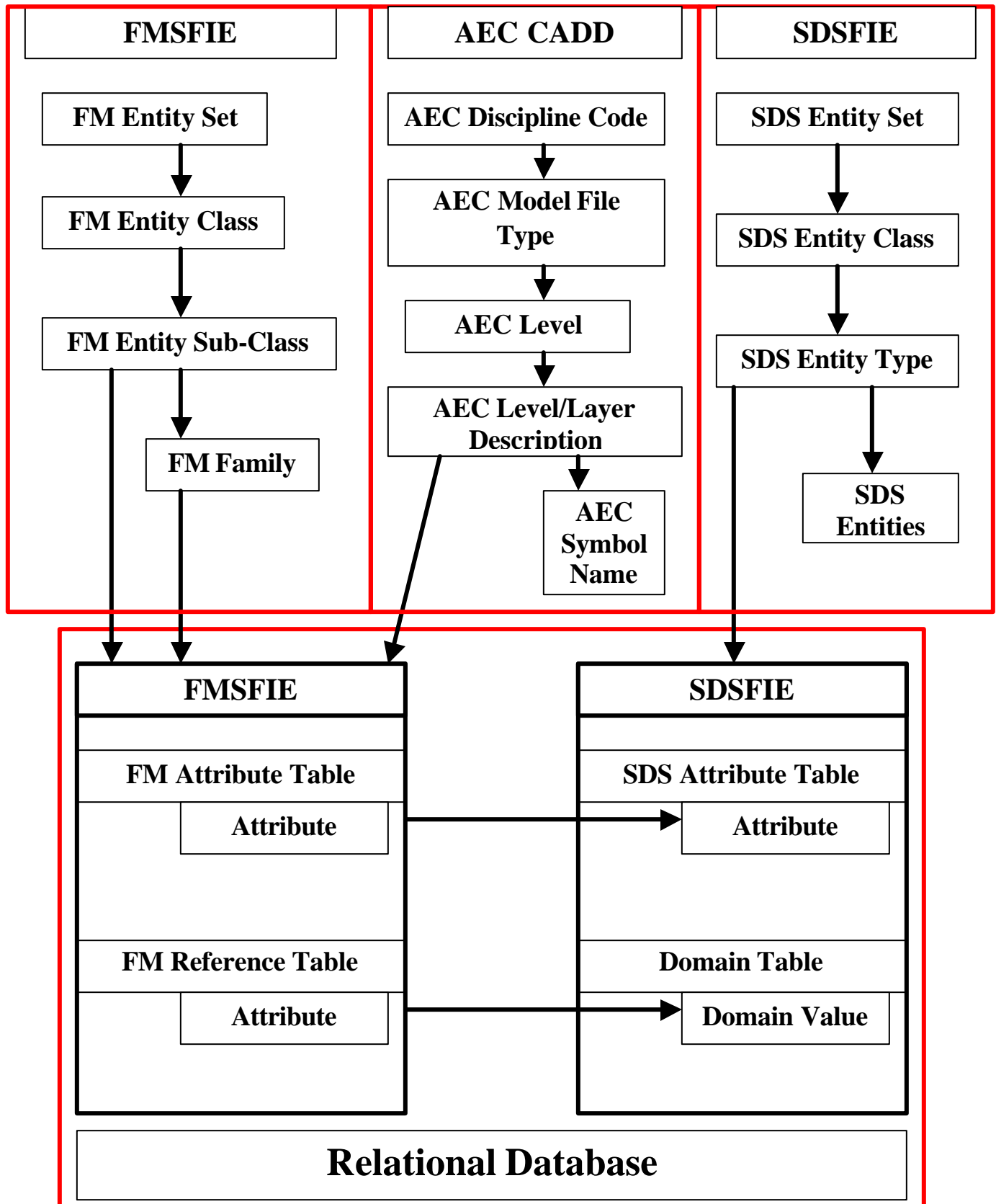
Family – A functional sub-group of the SUB-CLASS corresponding to different business disciplines, or different perspectives in the way the data is structured below the Entity Sub-Class.

Attribute Table – Relational database table comprising a grouping of similar records.

Reference Table – Relational database table with joins to one or more Domain Tables, and descriptive information concerning the reference table.

Domain Table – Database table containing a listing of valid (also called permissible or reference) values. Also called a “look-up” table.

CADD/GIS/FM Standards Development Data Model



Transactional FMSFIE Naming Convention Criteria

Transactional FMSFIE Naming Convention Criteria

- 1. Entity Set** – Broad grouping of real property management responsibilities.
 - a. Name – 32 characters
 - b. Abbreviation – 2 characters
 - c. Class Prefix – 12 characters
 - d. Common Name Prefix – 15 characters
 - e. Table Prefix – 2 characters
- 2. Entity Class** – Sub-grouping of an Entity Set providing a grouping of similar real property classifications based on legal reporting requirements.
 - a. Name – 32 characters
 - b. Abbreviation – 3 characters
 - c. Table Prefix – 5 characters
- 3. Entity Sub-Class** – Sub-grouping of an Entity Class based on similar life-cycle event and temporal real property information.
 - a. Name – 32 characters
 - b. Abbreviation – 3 characters
 - c. Table Prefix – 8 characters
- 4. Family** – A functional sub-group of the SUB-CLASS corresponding to different business disciplines, or different perspectives in the way the data is structured below the Entity Sub-Class. If no functional sub-group applies to the entity, a Family of "NONE" ("non") will be assigned.
 - a. Name – 32 characters
 - b. Abbreviation – 3 characters
 - c. Table Prefix – 11 characters

5. Attribute Table –

a. Logical Table Name –

- (1) Maximum Length = 75 characters.
- (2) Criteria = Family Name/Space/Table Common Name (e.g., Water Tank). Used in data model.

b. Table Common Name –

- (1) Maximum Length = 50 characters.
- (2) Criteria = Use name meaningful to user.

c. Table Physical Name –

- (1) Maximum Length = 30 characters.
- (2) Criteria = Use name meaningful to user.

d. Table Physical Code –

- (1) Maximum Length = 14 characters
- (2) Criteria = Composed of following abbreviations concatenated together:
 - (a) Entity Set (first 2 characters) (e.g., AM = Asset Management).
 - (b) Entity Class (next 3 characters) (e.g., FAC = Facility).
 - (c) Entity Sub-Class (next 3 characters) (e.g., UTL = Utilities).
 - (d) Family (next 3 characters) (e.g., WAT = Water System).
 - (e) Table (next 3 characters) (e.g., TNK = Tank).

6. Attribute –

a. Logical Attribute Name –

- (1) Maximum Length = 100 characters.
- (2) Criteria –
 - (a) Use DISA data element (attribute name if one exists). Otherwise follow DISA data element (attribute) naming conventions.
 - (b) Logical Name must be unique within each table.
 - (c) Logical Name composed of following sequence in data model:
 - Logical Data Model Table Name (e.g., Water Tank).
 - Property Modifier (optional) (e.g., Install).
 - Class Modifier (optional) (e.g., Start).
 - DISA Class Word (e.g., Date).
 - Example – Water Tank Install Start Date

b. Common Attribute Name –

- (1) Maximum Length = 100 characters.
- (2) Criteria –
 - (a) Named so that it is meaningful to user.
 - (b) Common Name must be unique within each table.
 - (c) Common Name composed of following sequence:
 - Common Table Name (optional) (e.g., Tank).
 - Property Modifier (optional) (e.g., Install).

- Class Modifier (optional) (e.g., Start).
- DISA Class Word (recommended) – Date
- Example – Tank Install Start Date

c. Physical Attribute Name –

(1) Maximum Length – 30 characters

(2) Criteria –

(a) Use DISA data element (attribute) access name if one exists. DISA class word abbreviations to be used in physical attribute names (if applicable).

(b) Keys (primary and foreign) do not end in _id (except keys linking to SDSFIE).

(c) Fields with associated domain (reference) tables will not be specified with a particular class word or abbreviation (i.e., not with _d or _cd).

(d) If DISA data element access name does not exist, Attribute Name will be composed of the following sequence of abbreviations. (at least one of the optional abbreviations is required):

- Table Name (optional) (e.g., TNK).
- Property Modifier (optional) (e.g., INSTL).
- Class Modifier (optional) (e.g., START).
- DISA Class Word (e.g., DT)
- Example – TNK_INSTL_START_DT

Transactional FMSFIE Entity Set Naming Conventions

Transactional FMSFIE Entity Set Naming Conventions

Transactional FMSFIE Entity Sets – Seven Entity Sets are currently established:

- Asset Management
- Work Management
- Environmental Management
- Financial Management
- Public Safety Management
- Organization Management
- Information Security Management

1. Asset Management – Items comprising the federal real property inventory and other related entities based on classification and need to support organizational requirements. Includes: (1) Tangible items comprising the federal real property inventory that can be referenced by location, and (2) Non-tangible items that cannot always be defined by a location, or do not exist as an inventory item in the real property management inventory.

- (1) Name – Assets
- (2) Abbreviation – AM
- (3) Class Prefix – assets
- (4) Common Name Prefix – Assets
- (5) Table Prefix - AM

2. Work Management – Change management processes that consist of planning, programming, acquisition, operations, maintenance, revitalization, evaluation, and disposal actions affecting real property and other related entities.

- (1) Name – Work
- (2) Abbreviation – WM
- (3) Class Prefix – work
- (4) Common Name Prefix – Work
- (5) Table Prefix - WM

3. Environmental Management – Defines the stewardship responsibilities as they relate to the federal real property environmental management practices.

- (1) Name – Environmental
- (2) Abbreviation – EM
- (3) Class Prefix – env
- (4) Common Name Prefix – Environmental
- (5) Table Prefix - EM

4. Financial Management – Planning, programming, and execution of appropriations associated with real property management.

- (1) Name – Financial
- (2) Abbreviation – FM
- (3) Class Prefix – financial
- (4) Common Name Prefix – Financial
- (5) Table Prefix - FM

5. Public Safety Management – Issues related to the protection of personnel and property.

- (1) Name – Public Safety
- (2) Abbreviation – SM
- (3) Class Prefix – safety
- (4) Common Name Prefix – Public Safety
- (5) Table Prefix - SM

6. Organization Management – A structured grouping of personnel and the roles they perform as it relates to an integrated work environment.

- (1) Name – Organization
- (2) Abbreviation – OM
- (3) Class Prefix – organization
- (4) Common Name Prefix – Organization
- (5) Table Prefix - OM

7. Information Security Management – Controlled access to data and information as it relates to the roles of personnel.

- (1) Name – Information Security
- (2) Abbreviation – IM
- (3) Class Prefix – information
- (4) Common Name Prefix – Information
- (5) Table Prefix - IM

Transactional FMSFIE Entity Class Naming Conventions

Notes:

1. Data elements denoted in blue are included in the FY03 release of the transactional FMSFIE.
2. "**core**" ("cor"), with a mandatory sub-class of "base" ("bas"), represents a special case of the CLASS structure indicating an entity whose implementation not only crosses multiple CLASSES, but, potentially, multiple ENTITY SETS. These entities are NOT separately modeled but may be referenced from any of the Facility Management Standard Entity Sets.

Entities with a class name of "core" and a sub-class name of "base" fall into two "FAMILIES". These are "reference" ("ref"), which includes those entities containing discrete domain values referenced from multiple attributes, and "generic" ("gen") which contain entities with data common throughout the FMSFIE Standard model.

3. Reference Tables will be placed within the most appropriate Class, Subclass, & Family.

Example:

FM Entity Set – Assets

Table Name – Space Type Reference

FM Entity Class – Facility

FM Entity Subclass – Building

FM Family - Space

A. Entity Set - Asset Management – 6 Entity Classes are currently established:

- **Core**
- **Facility**
- **Equipment**
- **Land**
- **Non-Tangible**
- **Transportation**

Asset Management Entity Set			
Entity Class Name	Abbreviation	Table Prefix	Definition
Core	cor	amcor	Common and parent tables for the Asset Entity Set.
Facility	fac	amfac	Inventory of tangible real property improvements, e.g., buildings, structures, and utilities. Comprises Department of Defense (DoD) Real Property Class 2.
Equipment	equ	amequ	Inventory of personal property and plant equipment. Comprises DoD Real Property Class 3.
Land	lan	amlan	Inventory of tangible real property associated with land. DoD Real Property Class 1.
Non-Tangible	nta	amnta	Inventory of items which cannot always be defined by a location, or do not exist as an inventory item in real property management.
Transportation	tra	amtra	Inventory of transportation equipment.

B. Entity Set - Work Management – 6 Entity Classes are currently established:

- **Core**
- **Service**
- **Construction**
- **Operations**
- **Lease**
- **Equipment**

Work Management Entity Set			
Entity Class Name	Abbreviation	Table Prefix	Definition
Core	cor	wmcor	Common and parent tables for Work Entity Set.
Service	svc	wmsvc	Useful labor that does not produce a tangible commodity. Can include “management and professional support services” which means labor that provides engineering or technical support, assistance, advice, or training for the efficient and effective management and operation of organizations, activities, or systems. Those services include efforts that support or contribute to improved organization or program management, logistics management, project monitoring and reporting, data collection, budgeting, accounting, auditing, and administrative or technical support for conferences and training programs. Service also includes, “engineering and technical services” means labor that take the form of advice, assistance, training, or hands-on training necessary to maintain and operate fielded weapon systems, equipment, and components (including software when applicable) at design or required levels of effectiveness. Can also include custodial services. (31 USC 1105 and 10 USC 2212)
Construction	con	wmcon	Construction includes surveys and site preparation; acquisition, conversion, rehabilitation, and installation of facilities; acquisition and installation of equipment and appurtenances integral to the project; acquisition and installation of supporting facilities (including utilities) and

			appurtenances incident to the project; and planning, supervision, administration, and overhead incident to the project. (10 USC 2802)
Operations	ops	wmops	A military action or the carrying out of a strategic, operational, tactical, service, training, or administrative military mission. Includes research, development, testing and evaluation (T&E), and range and training, (Joint Publication 1-02 “Department of Defense Dictionary of Military and Associated Terms,” 9 January 2003 and MFS working group 4-1-2003).
Lease	lea	wmlea	An agreement conveying the right to use property, plant, or equipment (land, depreciable assets, or both), usually for a stated period of time. For financial statement reporting and disclosure purposes, leases are classified as either capital or operating based on specific criteria. Capital leases are contracts or agreements for the use of personal or real property items that possess the characteristics of a purchase and transfers all the benefits and risks of ownership to the lessee. An operating lease is an agreement conveying the right to use property for a limited time in exchange for periodic rental payments. [US Department of Commerce Accounting Principles for NOAA -]
Equipment Installation	equ	wmequ	Modifications to real property improvements such as buildings, structures, ground improvement structures, and utilities required solely for the installation of an item of personal property. Such personal property includes accessories and furnishings that are moveable and not affixed or integral to the facility. [OPNAV 11010.20 Facilities Project Manual]

C. Entity Set - Environmental Management – 6 Entity Classes are currently established:

- Core
- Compliance
- Restoration
- Pollution Prevention
- Conservation
- Environmental Sampling

Environmental Management Entity Set			
Entity Class Name	Abbreviation	Table Prefix	Definition
Core	cor	emcor	Common and parent tables for Environmental Entity Set.
Compliance	svc	emcsv	Includes all activities and projects that utilize end-of-pipe treatment or disposal methods to meet applicable environmental requirements (DOD Instruction 4715.4 Pollution Prevention). An end-of-pipe discharge is waste that is released directly out of the end of a pipe into an environmental media such as soil, water, air, or groundwater. An end-of-pipe treatment is any effort to control, limit, or reduce the toxicity of such a discharge before it is released into the environment. (derived from GSA's Storm Water Pollution Prevention Fact Sheet dated November 1998)
Restoration	res	emres	The term "environmental restoration" means actions taken consistent with a permanent remedy to prevent or minimize the release of hazardous substances into the environment so that such substances do not migrate to cause substantial danger to present or future public health or welfare or the environment. (10 USC 2701 Notes)
Pollution Prevention	pol	empol	Means "source reduction," as defined in the Pollution Prevention Act (PPA), and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources; or protection of natural resources by conservation or recycling. Source Reduction" means any practice which reduces the amount of any hazardous

			<p>substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. "Source reduction" does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a hazardous substance, pollutant, or contaminant through a process or activity which itself is not integral to and necessary for the production of a product or the providing of a service. (derived from 42 USC 11001 Notes and 42 USC 13102.)</p>
Conservation	cmp	emcmp	<p>The terms "conserve", "conserving", and "conservation" mean to use, and the use of, such methods and procedures which are necessary to ensure, to the maximum extent practicable, the well being and enhancement of fish and wildlife and their habitats for the ecological, educational, esthetic, cultural, recreational, and scientific enrichment of the public. Such methods and procedures may include, but are not limited to, any activity associated with scientific resources management, such as research, census, law enforcement, habitat acquisition, maintenance, development, information education, population manipulation, propagation, technical assistance to private landowners, live trapping, and transplantation (16 USC 2902)</p>
Environmental Sampling	sam	emsam	<p>The all-encompassing act of monitoring the environment, measuring, collecting and analyzing samples of air, water, soil, foodstuffs, bio ta, and other media from various sites and their environs. Its purpose is</p>

			to show that applicable standards are met, to assess exposures to members of the public, and to assess effects, if any, on the environment. [Jefferson Labs, US Department of Energy 2003)
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D. Entity Set - Financial Management – 6 Entity Classes are currently established:

- Core
- [Contracts](#)
- Civilian Workforce
- Material
- Training
- Travel

Financial Management Entity Set			
Entity Class Name	Abbreviation	Table Prefix	Definition
Core	cor	fincor	Common and parent tables for Financial Entity Set.
Contracts	cnt	fmcnt	
Civilian Workforce	civ	fmciv	
Material	mat	fmmat	
Training	trg	fmtrg	
Travel	trv	fmtrv	

E. Entity Set - Public Safety Management – 7 Entity Classes have been established:

- Core
- Environmental
- Emergency Response
- Occupational Health
- Force Protection
- Explosives
- Fire

Public Safety Management Entity Set			
Entity Class Name	Abbreviation	Table Prefix	Definition
Core	cor	smcor	Common and parent tables for Public Safety Entity Set.
Environmental Work Place	env	smenv	Relating to the establishment and other locations where one or more employees are working or are present as a condition of their employment. The work environment includes not only physical locations, but also the equipment or materials used by the employee during the course of his or her work. [29 CFR 1904.5(b)]
Emergency Response	emg	smemg	Means a response effort by employees from outside the immediate release area or by other designated responders (i.e., mutual aid groups, local fire departments, etc.) to an occurrence which results, or is likely to result, in an uncontrolled release of a hazardous substance. Responses to incidental releases of hazardous substances where the substance can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area, or by maintenance personnel are not considered to be emergency responses within the scope of this standard. Responses to releases of hazardous substances where there is no potential safety or health hazard (i.e., fire, explosion, or chemical exposure) are not considered to be emergency responses. (29 CFR 1910.120)
Explosives	exp	smexp	Any chemical compound mixture, or device, the primary or common purpose of which is

			to function by explosion; the term includes, but is not limited to, dynamite and other high explosives, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs, detonating cord, igniter cord, and igniters. (18 USC 841)
Force Protection	for	smfor	Security program developed to protect Service members, civilian employees, family members, facilities and equipment, in all locations and situations, accomplished through the planned and integrated application of combating terrorism, physical security, operations security, personal protective services supported by intelligence, counterintelligence, and other security programs [1998 FBI Guidance Publication]
Occupational Health	osh	smosh	The conditions, or the adoption or use of one or more practices, means, methods, operations, or processes, reasonably necessary or appropriate to provide safe or healthful employment and places of employment. [29 USC 652]
Fire Protection	fir	smfir	The term "fire protection" includes personal services and equipment required for fire prevention, the protection of life and property from fire, and fire fighting; The term "fire organization" means any governmental entity or public or private corporation or association maintaining fire protection facilities within the United States, its Territories and possessions, and any governmental entity or public or private corporation or association which maintains fire protection facilities in any foreign country in the vicinity of any installation of the United States (42 USC 1856)

F. Entity Set - Organization Management – 4 Entity Classes have been established:

- [Core](#)
- **People**
- **Roles**
- **Workflow**

Organization Management Entity Set			
Entity Class Name	Abbreviation	Table Prefix	Definition
Core	cor	omcor	Common and parent tables for Organization Management Entity Set.
People	peo	ompeo	
Roles	rol	omrol	
Workflow	wrk	omwrk	

G. Entity Set - Information Security Management – 4 Entity Classes have been established:

- Core
- Databases
- Networks
- Applications

Information Security Management Entity Set			
Entity Class Name	Abbreviation	Table Prefix	Definition
Core	cor	imcor	Common and parent tables for Information Security Management Entity Set.
Databases	db	imdb	
Networks	net	imnet	
Applications	app	imapp	

Transactional FMSFIE Entity Sub-Class Naming Conventions

Notes:

1. Data elements denoted in blue are included in the FY03 release of the transactional FMSFIE.
2. **"core"** ("cor"), with a mandatory sub-class of "base" ("bas"), represents a special case of the CLASS structure indicating an entity whose implementation not only crosses multiple CLASSES, but, potentially, multiple ENTITY SETS. These entities are NOT separately modeled but may be referenced from any of the Facility Management Standard Entity Sets.

Entities with a class name of "core" and a sub-class name of "base" fall into two "FAMILIES". These are "reference" ("ref"), which includes those entities containing discrete domain values referenced from multiple attributes, and "generic" ("gen") which contain entities with data common throughout the FMSFIE Standard model.

3. Reference Tables will be placed within the most appropriate Class, Subclass, & Family.

Example:

FM Entity Set – Assets

Table Name – Space Type Reference

FM Entity Class – Facility

FM Entity Subclass – Building

FM Family - Space

A. Entity Set - Asset Management –

1. Entity Class – Core – 1 Entity Sub-Class is currently established:

- **Base**

Asset Management Entity Set – Core Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	amcorbas	Common and parent tables for Asset Entity Set, Core Entity Class.

2. Entity Class – Facility – 4 Entity Sub-Classes have been established:

- **Base**
- **Building**
- **Utility**
- **Structure**

Asset Management Entity Set – Facility Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	amfacbas	Common and parent tables for Asset Entity Set, Facility Entity Class.
Building	blg	amfacblg	Inventory of tangible real property improvements, which comprise the components of a building (Includes utilities located within a building) (DoD Real Property Class 2).
Utility	utl	amfacutl	Inventory of tangible real property improvements, which comprise the components of a utility (Includes utilities located exterior of buildings) (DoD Real Property Class 2).
Structure	str	amfacstr	Inventory of tangible real property ground improvements structures not associated with a building or utility (DoD Real Property Class 2).

3. Entity Class – Equipment – 4 Entity Sub-Classes have been established:

- Base
- Industrial
- Minor Property
- Personal

Asset Management Entity Set – Equipment Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	amequbas	Common and parent tables for Asset Entity Set, Equipment Entity Class.
Industrial	ind	amequind	Inventory of fixed and large industrial plant equipment (DoD Real Property Class 3).
Minor Property	mpr	amequmpr	Inventory of minor equipment (DoD Real Property Class 3).
Personal	per	amequper	Inventory of personal equipment (DoD Real Property Class 3).

4. Entity Class – Land – 6 Entity Sub-Classes have been established:

- Base
- Improved
- Semi-Improved
- Unimproved
- Easement
- Other

Asset Management Entity Set – Land Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	amlanbas	Common and parent tables for Asset Entity Set, Land Entity Class.
Improved	imp	amlanimp	Land on which buildings, structures, or other improvements are located, or which has been prepared for a specific use (e.g., golf courses).
Semi-Improved	sim	amlansim	Land which has undergone some preparation for one or more uses (e.g., walking trails).
Unimproved	uim	amlanuim	Land which remains in its natural state.
Easement	eas	amlaneas	A nonprofitable interest in land owned by another that entitles its holder to a specific limited use or enjoyment.
Other	oth	amlanoth	Land which does not conform to the improved, semi-improved, unimproved, or easement category.

5. Entity Class – Transportation – 4 Entity Sub-Classes have been established:

- **Base**
- **Material Handling Equipment**
- **Vehicles**
- **Weight Handling Equipment**

Asset Management Entity Set – Transportation Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	amtrabas	Common and parent tables for Asset Entity Set, Transportation Entity Class.
Material Handling Equipment	mhe	amtramhe	Equipment whose purpose is earthwork, or moving construction material.
Vehicles	veh	amtraveh	Automobiles, trucks, and other types of vehicles.
Weight Handling Equipment	whe	amtrawhe	Equipment whose purpose is moving heavy items from one location to another.

6. Entity Class – Non-Tangible – 3 Entity Sub-Classes have been established:

- **Base**
- **Proposed Leases**
- **Proposed Assets**

Asset Management Entity Set – Non-Tangible Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	amntabas	Common and parent tables for Asset Entity Set, Non-Tangible Entity Class.
Proposed Leases	ple	amntaple	Leases, which are conceptual in nature, or proposed for implementation some time in the future.
Proposed Assets	pas	amntapas	Physical improvements which are conceptual in nature, or proposed for construction or installation at some time in the future.

B. Entity Set - Work Management -

1. Entity Class – Core – 1 Entity Sub-Class is currently established:

- **Base**

Work Management Entity Set – Core Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	wmcorbas	Common and parent tables for Work Management Entity Set, Core Entity Class.

2. Entity Class – Service – 5 Entity Sub-Classes are currently established:

- **Base**
- **Design**
- **Inspection**
- **Custodial**
- **Moves**

Work Management Entity Set – Service Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	wmsvcbas	Common and parent tables for Work Management Entity Set, Service Entity Class.
Design	des	wmsvcdes	The process of preparing a specific plan for the construction, repair, demolition, or renovation of one or more assets.
Inspection	ins	wmsvcins	The process of observing and recording the physical appearance, condition, or status of one or more assets.
Custodial	cus	wmsvccus	The process of performing routine cleaning and maintenance activities associated with one or more assets.
Moves	mov	wmsvcmov	The process of managing spaces.

3. Entity Class – Construction – 5 Entity Sub-Classes are currently established:

- Base
- Alterations
- Improvements
- Repair/Demolition
- Maintenance

Work Management Entity Set – Construction Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	wmconbas	Common and parent tables for Work Management Entity Set, Construction Entity Class.
Alterations	alt	wmconalt	The process of altering, or renovating, one or more existing assets (e.g., adding a room to an existing building).
Improvements	imp	wmconimp	The process of constructing, or installing, one or more new assets (e.g., constructing a new building).
Repair/Demolition	rde	wmconrde	The process of repairing, or demolishing, constructing, one or more existing assets (e.g., constructing a new building).
Maintenance	mnt	wmconmnt	The process of performing maintenance activities associated with one or more new assets (e.g., constructing a new building).

4. Entity Class – Operations – 6 Entity Sub-Classes are currently established:

- **Base**
- **Transportation**
- **Utility**
- **Airfield**
- **Real Estate**
- **Range & Training**

Work Management Entity Set – Operations Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	wmopsbas	Common and parent tables for Work Management Entity Set, Operations Entity Class.
Transportation	tra	wmopstra	Processes and functions associated with the operation of transportation facilities.
Utility	utl	wmopsutl	Processes and functions associated with the operation of utility facilities.
Airfield	air	wmopsair	Processes and functions associated with the operation of utility facilities.
Real Estate	res	wmopsres	Processes and functions associated with the management of real estate.
Range & Training	rtr	wmopsrtr	Processes and functions associated with the operation of range and training facilities.

5. Entity Class – Lease – 5 Entity Sub-Classes are currently established:

- Base
- Building
- Relocatable
- Equipment
- Land

Work Management Entity Set – Lease Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	wmleabas	Common and parent tables for Work Management Entity Set, Lease Entity Class.
Building	blg	wmleablg	Processes and functions associated with the leasing of buildings.
Relocatable	rel	wmlearel	Processes and functions associated with the leasing of relocatable assets.
Equipment	equ	wmleaequ	Processes and functions associated with the leasing of equipment.
Land	lnd	wmlealnd	Processes and functions associated with the leasing of land.

6. Entity Class – Equipment – 4 Entity Sub-Classes are currently established:

- Base
- Installation
- Maintenance
- Disposal

Work Management Entity Set – Equipment Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	wmequbas	Common and parent tables for Work Management Entity Set, Equipment Entity Class.
Installation	ins	wmequins	Processes and functions associated with the installation and setup of equipment.
Maintenance	mnt	wmequmnt	Processes and functions associated with the maintenance of equipment.
Disposal	dis	wmequdis	Processes and functions associated with the disposal of equipment.

C. Entity Set - Environmental Management -

1. Entity Class – Core – 1 Entity Sub-Class is currently established:

- **Base**

Environmental Management Entity Set – Core Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	emcorbas	Common and parent tables for Environmental Management Entity Set, Base Entity Class.

2. Entity Class – Compliance – 15 Entity Sub-Classes are currently established:

- **Base**
- **NPDES Permits**
- **Air Emission Permits**
- **Solid/Hazardous Waste**
- **Hazardous Materials**
- **Regulated Storage Tanks**
- **Drinking Water Quality**
- **Right-to-Know**
- **Toxic Releases**
- **NEPA**
- **Asbestos**
- **Noise**
- **Environmental Audits**
- **Indoor Air Quality**
- **Toxic Substances**
- **Sustainable Development**

Environmental Management Entity Set – Compliance Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	emcombas	Common and parent tables for Environmental Management Entity Set, Compliance Entity Class.
NPDES Permit	npd	emcomnpd	Processes and functions associated with the acquisition and monitoring of National Pollutant Discharge Elimination System (NPDES) permits.
Air Emission Permit	aep	emcomaep	Processes and functions associated with the acquisition and monitoring of air emission permits.
Solid & Hazardous Wast	shw	emcomshw	Processes and functions associated with the management, handling, transport, & disposal/treatment of solid and hazardous waste.
Hazardous Material	hmt	emcomhmt	Processes and functions associated with the management, handling, transport, & disposal/treatment of hazardous materials.
Regulated Storage Tank	rst	emcomrst	Processes and functions associated with the management, use, monitoring, and closing of regulated storage tanks.
Drinking Water Quality	dwq	emcomdwq	Processes and functions associated with the management, protection, and monitoring of drinking water quality.
Right to Know	rtk	emcomrtk	Processes and functions associated with compliance with the Federal right-to-know laws and regulations.
Toxic Releases	trl	emcomtrl	Processes and functions associated with monitoring, response, and compliance with the Federal laws and regulations associated with toxic releases.
NEPA	nep	emcomnep	Processes and functions associated with compliance with the Federal laws and regulations associated with the National Environmental Protection Act (NEPA).
Asbestos	asb	emcomasb	Processes and functions associated with asbestos monitoring, abatement, and compliance with the Federal laws and regulations associated with asbestos.
Noise	noi	emcomnoi	Processes and functions associated with noise monitoring, abatement, and compliance with the Federal laws and regulations associated with noise.

Environmental Management Entity Set – Compliance Entity Class (Cont.)			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Environmental Audits	eau	emcomeau	Processes and functions associated with conducting environmental audits.
Indoor Air Quality	iaq	emcomiaq	Processes and functions associated with indoor air quality monitoring and compliance with the Federal laws and regulations associated with indoor air quality.
Toxic Substances	tsb	emcomtsb	Processes and functions associated with toxic substances monitoring and control, and compliance with the Federal laws and regulations associated with toxic substances (e.g., lead, pcbs).
Sustainable Development	sud	emcomsud	Processes and functions associated with sustainable development, and compliance with the Federal laws and regulations associated with sustainable development.

3. Entity Class – Restoration – 10 Entity Sub-Classes are currently established:

- Base
- Preliminary Assessment
- Site Assessment
- Confirmation Study
- Record of Decision
- State Coordination
- Remedial Design
- Remedial Action
- Long-Term Monitoring
- UXO Clean-up

Environmental Management Entity Set – Restoration Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	emresbas	Common and parent tables for Environmental Management Entity Set, Restoration Entity Class.
Preliminary Assessment	pas	emrespas	Processes and functions associated with the accomplishment of an initial review (consisting of a field reconnaissance & record search) of a geographic area for the purpose of determining if current or past usage is suspected to have contributed to pollutants in the soil, sediment, surface water, or groundwater.
Site Assessment	sas	emressas	Processes and functions associated with the accomplishment of a follow-up review of a geographic area for the purpose of determining if current or past usage is suspected to have contributed to pollutants in the soil, sediment, surface water, or groundwater.
Confirmation Study	cst	emrescst	Processes and functions associated with the accomplishment of a thorough investigation of a geographic area for the purpose of verifying the extent of pollution to the soil, sediment, surface water, or groundwater.
Record of Decision	rod	emresrod	Processes and functions associated with the accomplishment of a record of decision, an agreement between environmental regulatory agency and organization concerning schedule and methodology for accomplishing an environmental remediation effort.

Environmental Management Entity Set – Restoration Entity Class (Cont.)			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
State Coordination	scr	emresscr	Processes and functions associated with coordination with state environmental regulatory agencies concerning environmental restoration efforts.
Remedial Design	red	emresred	Processes and functions associated with the preparation of plans and specifications for accomplishment of an environmental restoration effort.
Remedial Action	rac	emresrac	Processes and functions associated with the construction of remediation facilities and completion of an environmental restoration effort.
Long Term Monitoring	ltm	emresltm	Processes and functions associated with the monitoring of remediation facilities (e.g., wells) constructed as a part of an environmental restoration effort.
UXO Clean-up	uxo	emresuxo	Processes and functions associated with the removal and clean-up of unexploded ordnance.

4. Entity Class – Pollution Prevention – 4 Entity Sub-Classes are currently established:

- **Base**
- **Fuel**
- **Hazardous Material**
- **Risk Management**

Environmental Management Entity Set – Pollution Prevention Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	empolbas	Common and parent tables for Environmental Management Entity Set, Pollution Prevention Entity Class.
Fuel	ful	empolful	Processes and functions associated with the prevention of fuel spills and hazards.
Hazardous Material	hma	empolhma	Processes and functions associated with the prevention of hazardous material spills and hazards.
Risk Management	rma	empolrma	Processes and functions associated with the prevention, or minimization, of exposure of humans to environmental pollution and hazards.

5. Entity Class – Conservation – 15 Entity Sub-Classes are currently established:

- Base
- Watershed/Source Water
- Wetlands Management
- Cultural/Historical Resources
- Endangered Species
- Fish/Wildlife
- Forestry
- Land Use Management
- Public Education
- Recreation

Environmental Management Entity Set – Conservation Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	emconbas	Common and parent tables for Environmental Management Entity Set, Conservation Entity Class.
Watershed & Source Water	wat	emconwat	Processes and functions associated with the protection and conservation of watersheds and source water supplies.
Wetlands	wet	emconwet	Processes and functions associated with the protection and conservation of wetlands.
Cultural & Historical Resources	cul	emconcul	Processes and functions associated with the protection and conservation of cultural and historical resources.
Endangered Species	esp	emconesp	Processes and functions associated with the protection and conservation of endangered species.
Fish & Wildlife	fwi	emconfwi	Processes and functions associated with the protection and conservation of fish and wildlife.
Forestry	for	emconfor	Processes and functions associated with the protection and conservation of forested areas.
Land Use	lau	emconlau	Processes and functions associated with comprehensive planning, and designation of areas for specific land uses.
Public Education	ped	emconped	Processes and functions associated with the development and administration of public education activities.
Recreation	rec	emconrec	Processes and functions associated with the development, maintenance, and conservation of designated areas for recreational purposes.

5. Entity Class – Environmental Sampling – 5 Entity Sub-Classes are currently established:

- **Base**
- **Sample Collection**
- **Sample Analysis**
- **Sample Results**

Environmental Management Entity Set – Environmental Sampling Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	emsambas	Common and parent tables for Environmental Management Entity Set, Environmental Sampling Entity Class.
Sample Collection	sco	emsamsco	Processes and functions associated with the collection, packaging, recording, preservation, and shipment of environmental samples.
Sample Analysis	san	emsamsan	Processes and functions associated with the collection, packaging, recording, preservation, and shipment of environmental samples.
Sample Results	sre	emsamsre	Processes and functions associated with the management, interpretation, and validation of environmental sample analytical results.

D. Entity Set - Financial Management -

1. Entity Class – Core – 1 Entity Sub-Class is currently established:

- Base

Financial Management Entity Set – Core Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	fmcorbas	Common and parent tables for Financial Management Entity Set, Base Entity Class.

2. Entity Class – Contracts – 1 Entity Sub-Class is currently established:

- Base

Financial Management Entity Set – Contracts Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	fmcntbas	Common and parent tables for Financial Management Entity Set, Contracts Entity Class.

3. Entity Class – Civilian Workforce – 1 Entity Sub-Class is currently established:

- Base

Financial Management Entity Set – Civilian Workforce Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	fmcivbas	Common and parent tables for Financial Management Entity Set, Civilian Workforce Entity Class.

4. Entity Class – Material – 1 Entity Sub-Class is currently established:

- Base

Financial Management Entity Set – Material Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	fmmtbas	Common and parent tables for Financial Management Entity Set, Material Entity Class.

5. Entity Class – Training – 1 Entity Sub-Class is currently established:

- **Base**

Financial Management Entity Set – Training Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	fmtrgbas	Common and parent tables for Financial Management Entity Set, Training Entity Class.

6. Entity Class – Travel – 1 Entity Sub-Class is currently established:

- **Base**

Financial Management Entity Set – Travel Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	fmtrvbass	Common and parent tables for Financial Management Entity Set, Travel Entity Class.

D. Entity Set – Public Safety Management -

1. Entity Class – Core – 1 Entity Sub-Class is currently established:

- Base

Public Safety Entity Set – Core Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	smcorbas	Common and parent tables for Public Safety Management Entity Set, Core Entity Class.

2. Entity Class – Explosives – 4 Entity Sub-Classes are currently established:

- Base
- Ordnance Inventory
- Mishap
- UXO

Public Safety Entity Set – Explosives Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	smexpbas	Common and parent tables for Public Safety Management Entity Set, Explosives Entity Class.
Ordnance Inventory	ord	smexpord	Processes and functions associated with safe management and control of stored ordnance.
Mishap	mis	smexpmis	Processes and functions associated with recording, investigation, and documentation of findings associated with explosives mishaps.
UXO	uxo	smexpuxo	Processes and functions associated with safe management and control of areas containing unexploded ordnance.

3. Entity Class – Fire – 3 Entity Sub-Classes are currently established:

- Base
- Suppression
- Prevention

Public Safety Entity Set – Fire Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	smfirbas	Common and parent tables for Public Safety Management Entity Set, Fire Entity Class.
Suppression	sup	smfirsup	Processes and functions associated with the suppression of fire.
Prevention	pre	smfirpre	Processes and functions associated with the prevention of fire.

4. Entity Class – Environmental – 3 Entity Sub-Classes are currently established:

- Base
- Training
- Ergonomics

Public Safety Entity Set – Environmental Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	smenvbas	Common and parent tables for Public Safety Management Entity Set, Environmental Entity Class.
Training	tra	smenvtra	Processes and functions associated with the training of personnel in the proper use of personal protective equipment (PPE) and safe conductance of environmental remediation, monitoring, or compliance activities.
Ergonomics	erg	smenverg	Processes and functions associated with the design and implementation of measures focusing on improving working conditions through prevention of noise and vibration problems, prevention of electric shock hazards, minimization of working conditions that contribute to discomfort (e.g., control temperature, humidity, lighting, color schemes, furniture, computer monitors).

5. Entity Class – Force Protection – 1 Entity Sub-Class is currently established:

- **Base**

Public Safety Entity Set – Force Protection Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	smforbas	Common and parent tables for Public Safety Management Entity Set, Force Protection Entity Class.

6. Entity Class – Occupational Safety & Health – 1 Entity Sub-Class is currently established:

- **Base**

Public Safety Entity Set – Occupational Safety & Health Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	smoshbas	Common and parent tables for Public Safety Management Entity Set, Occupational Safety & Health Entity Class.

7. Entity Class – Emergency Response – 1 Entity Sub-Class is currently established:

- **Base**

Public Safety Entity Set – Emergency Response Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	smemgbas	Common and parent tables for Public Safety Management Entity Set, Emergency Response Entity Class.

E. Entity Set – Organization Management -

1. Entity Class – Core – 1 Entity Sub-Class is currently established:

- **Base**

Organization Management Entity Set – Core Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	omcorbas	Common and parent tables for Organization Management Entity Set, Core Entity Class.

2. Entity Class – People – 4 Entity Sub-Classes are currently established:

- **Base**
- **Civilian**
- **Military**
- **Contractors**

Organization Management Entity Set –People Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	ompeobas	Common and parent tables for Organization Management Entity Set, People Entity Class.
Civilian	civ	ompeociv	Processes and functions associated with organization of civilian employees.
Military	mil	ompeomil	Processes and functions associated with organization of military employees.
Contractors	con	ompeocon	Processes and functions associated with organization of contractor employees.

3. Entity Class – Roles – 1 Entity Sub-Class is currently established:

- **Base**

Organization Management Entity Set –Roles Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	omrolbas	Common and parent tables for Organization Management Entity Set, Roles Entity Class.

4. Entity Class – Workflow – 1 Entity Sub-Class is currently established:

- **Base**

Organization Management Entity Set –Workflow Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	omwrkbas	Common and parent tables for Organization Management Entity Set, Workflow Entity Class.

F. Entity Set – Information Security Management -

1. Entity Class – Core – 1 Entity Sub-Class is currently established:

- Base

Information Security Management Entity Set –Core Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	imcorbas	Common and parent tables for Information Security Management Entity Set, Core Entity Class.

2. Entity Class – Applications – 1 Entity Sub-Class is currently established:

- Base

Information Security Management Entity Set –Applications Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	imappbas	Common and parent tables for Information Security Management Entity Set, Applications Entity Class.

3. Entity Class – Databases – 1 Entity Sub-Class is currently established:

- Base

Information Security Management Entity Set –Databases Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	imdbsbas	Common and parent tables for Information Security Management Entity Set, Databases Entity Class.

4. Entity Class – Networks – 1 Entity Sub-Class is currently established:

- **Base**

Information Security Management Entity Set –Networks Entity Class			
Entity Sub-Class Name	Abbreviation	Table Prefix	Definition
Base	bas	imnetbas	Common and parent tables for Information Security Management Entity Set, Networks Entity Class.

Transactional FMSFIE Family Naming Conventions

Notes:

1. Data elements denoted in blue are included in the FY03 release of the transactional FMSFIE.
2. **"core"** ("cor"), with a mandatory sub-class of "base" ("bas"), represents a special case of the CLASS structure indicating an entity whose implementation not only crosses multiple CLASSES, but, potentially, multiple ENTITY SETS. These entities are NOT separately modeled but may be referenced from any of the Facility Management Standard Entity Sets.

Entities with a class name of "core" and a sub-class name of "base" fall into two "FAMILIES". These are "reference" ("ref"), which includes those entities containing discrete domain values referenced from multiple attributes, and "generic" ("gen") which contain entities with data common throughout the FMSFIE Standard model.

3. Reference Tables will be placed within the most appropriate Class, Subclass, & Family.

Example:

FM Entity Set – Assets

Table Name – Space Type Reference

FM Entity Class – Facility

FM Entity Subclass – Building

FM Family - Space

A. Entity Set - Asset Management

1. Core Entity Class, Base Subclass – 1 Family is currently established:

- [Reference](#)

Asset Management Entity Set – Core Entity Class – Base Sub-Class			
Family Name	Abbreviation	Table Prefix	Definition
Reference	ref	amcorbasref	Reference (Domain Tables) for Asset Management Entity Set, Core Entity Class, Base Sub-Class.

2. Facility Entity Class, Building Subclass – 9 Families are currently established:

- [Architectural](#)
- **Structural**
- **Mechanical**
- **Electrical**
- **Plumbing**
- **Security**
- **Telecommunications**
- **Fire Protection**
- **Interior Design**

Asset Management Entity Set – Facility Entity Class – Building Sub-Class			
Family Name	Abbreviation	Table Prefix	Definition
Architectural	arc	amfacblgarc	
Structural	str	amfacblgstr	
Mechanical	mec	amfacblgmec	
Electrical	ele	amfacblgele	
Plumbing	plu	amfacblgplu	
Security	sec	amfacblgsec	
Telecommunications	tel	amfacblgtel	
Fire Protection	fir	amfacblgfir	
Interior Design	int	amfacblgint	

3. Facility Entity Class, Utility Subclass – 10 Families are currently established:

- **Water**
- **Wastewater**
- **Storm Water**
- **Fuel**
- **Natural Gas**
- **Electrical**
- **HVAC**
- **Tanks**
- **Cathodic Protection**

Asset Management Entity Set – Facility Entity Class – Utility Sub-Class			
Family Name	Abbreviation	Table Prefix	Definition
Water	wat	amfacutlwat	
Wastewater	wwt	amfacutlwwt	
Storm Water	swt	amfacutlswt	
Fuel	ful	amfacutlful	
Natural Gas	gas	amfacutlgas	
Electrical	ele	amfacutlele	
HVAC	hvc	amfacutlfvc	Heating, ventilation, & cooling
Tanks	tan	amfacutltan	
Cathodic Protection	cat	amfacutlcat	

4. Facility Entity Class, Structure Sub-Class – 10 Families are currently established:

- **Vehicle**
- **Rail**
- **Air**
- **Pedestrian**
- **Marine**
- **Flood Control**
- **Navigation**
- **Ground Improvements**
- **Ports/Harbors**
- **Recreation**
- **Military Range/Training**
- **Signs**

Asset Management Entity Set – Facility Entity Class – Structure Sub-Class			
Family Name	Abbreviation	Table Prefix	Definition
Vehicle	veh	amfacstrveh	
Rail	rai	amfacstrrai	
Air	air	amfacstrair	
Pedestrian	ped	amfacstrped	
Marine	mar	amfacstrmar	
Flood Control	flo	amfacstrflo	
Navigation	nav	amfacstrnav	
Ground Improvements	gro	amfacstrgro	
Ports & Harbors	por	amfacstrpor	
Recreation	rec	amfacstrrec	
Military Range & Training	mrt	amfacstrmrt	
Signs	sig	amfacstrsig	

B. Entity Set – Work Management –Family sub-groups have not yet been defined.

C. Entity Set – Environmental Management -Family sub-groups have not yet been defined.

D. Entity Set – Financial Management -Family sub-groups have not yet been defined.

E. Entity Set – Public Safety Management -Family sub-groups have not yet been defined.

F. Entity Set – Information Security Management -Family sub-groups have not yet been defined.

G. Entity Set – Organization Management –**1. Core Entity Class, Base Subclass – 1 Family is currently established:**

- [Reference](#)

Asset Management Entity Set – Core Entity Class – Base Sub-Class			
Family Name	Abbreviation	Table Prefix	Definition
Reference	ref	omcorbasref	Reference (Domain Tables) for Organization Management Entity Set, Core Entity Class, Base Sub-Class.